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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,716	01/18/2002	Gregg D. Sucha	A8287	6834

7590 10/14/2003

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EXAMINER	
ZAHN, JEFFREY N	
ART UNIT	**PAPER NUMBER**
2828	

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No. 10/050,716	Applicant(s) SUCHA ET AL.	
	Examiner Jeffrey N Zahn	Art Unit 2828	AU

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: 30-59.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

JZ 10/10/2003

Paul Ip
SPE 2828

Claim Rejections - 35 USC § 112
The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31, 35-37, 42-44, 48-53 and 58-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
It is unclear/vague what method steps are required to isolate the laser from an external environment.
Regarding Claims 31 and 35, it is unclear/vague what steps "acoustically damped" includes, i.e. how is the claimed device acoustically damped.
Regarding Claim 36, it is unclear/vague what steps are included to "hold to zero a time-averaged cavity length mismatch of the fiber laser Mismatch of the fiber lasers ?
Regarding Claim 37, it is unclear/vague what Applicant is claiming; "co-wrapping two fiber lasers on a single spool" without any other step to include the configuration/operation of the fiber lasers recited in the body of the claim is indefinite.
Regarding Claims 42-44, 48-52 and 58-59, it is unclear/vague what steps are include to incorporate a piezoelectric transducer as claimed
Regarding Claim 53, it is unclear/vague what structure "means for" refers to in the specification.

Claim Rejections - 35 USC § 102
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30-33, 35 and 37-41, 45-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Byron et al. (US 4847843).
Regarding Claims 30, 37, 41, 45-46, 53, 54 and 57 and all claims that depend therefrom,
Byron et al. discloses a method/device that stabilizes a short-pulse fiber laser that includes;
isolating a fiber laser (abstract) from an external environment;
wrapping said fiber onto a spool (abstract); and
operating the laser while said fiber remains on the said spool (abstract).
Regarding Claim 32, it is inherent of the Byron et al. device that the thermal expansion of the spool and fiber will be substantially equivalent because of the low temperatures associated with liquid nitrogen.
Regarding Claim 33, 35, and 54-56, Byron et al. discloses a temperature-controlled enclosure (abstract; Liquid Nitrogen) as claimed. The enclosure that holds the liquid nitrogen is inherently acoustically damped to some degree.

Claim Rejections - 35 USC § 103
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 34, 36 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byron et al. (US 4847843) as applied to Claim 30 and 45.
Byron et al. lacks first and second lasers with identical components configured as claimed. However, it would have been obvious to one o ordinary skill in the art at the time of the invention was made to duplicate the fiber laser of Byron et al., since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St Regis Paper Co. v Bemis Co. 193 USPQ 8.